## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018899 Address: 333 Burma Road **Date Inspected:** 25-Dec-2010

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** OBG

**Summary of Items Observed:** CWI Inspector: Mr. Qiu Wen

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication.

OBG Bay 14

Segments 13W and 14W

This QA Inspector observed ZPMC welder Mr. Wei Jun, stencil 067707 used shielded metal arc welding procedure specification WPS-345-SMAW-3G(3F)-FCM-Repair to make repairs of ultrasonic rejections in OBG segment 13CW weld DP3146-001-251. ZPMC has issued weld repair document B-WR-19548 that documents the repair of this weld. This QA Inspector observed ZPMC has recorded a welding current of 172 amps, 26.1 volts and a welding travel speed of 153mm per minute. This QA Inspector observed Mr. Wei Jun appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Li Wengou, stencil 066261 used shielded metal arc welding procedure specification WPS-345-SMAW-3G(3F)-FCM-Repair to make repairs of ultrasonic rejections in OBG segment 13CW weld DP3146-001-245. ZPMC has issued weld repair document B-WR-19546 that documents

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the repair of this weld. This QA Inspector observed ZPMC has recorded a welding current of 162 amps, 25.8 volts and a welding travel speed of 150mm per minute. This QA Inspector observed Mr. Li Wengou appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. He Hanbi, stencil 202122 used flux cored welding procedure WPS-B-T-2233-ESAB to make OBG segment 14W weld SEG3020A-010. This QA Inspector observed ZPMC QC Inspector Mr. Li Ping recorded a welding current of 170 amps, 25.7 volts and a travel speed of 153mm per minute. Mr. He Hanbi appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Li Xianyou, stencil 047866 used flux cored welding procedure WPS-B-T-2233-ESAB to make OBG segment 14W weld SEG3020A-010. This QA Inspector observed ZPMC QC Inspector Mr. Li Ping recorded a welding current of 165 amps, 25.3 volts and a travel speed of 149mm per minute. Mr. Li Xianyou appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Ji Yi, stencil 045268 used shielded metal arc welding procedure specification WPS-345-SMAW-3G(2F)-FCM-Repair-1 to make repairs of visual weld rejections of OBG segment 14W floor beam 33430. This QA Inspector observed a welding current of approximately 105 amps and the base materials appeared to have been preheated prior to welding. ZPMC QC Inspector Mr. Li Ping stated he did not know the weld numbers where Mr. Ji Yi had been welding. Mr. Ji Yi appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents. See the photograph below for additional information.



### **Summary of Conversations:**

See Above.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey +8615000026784, who represents the Office of Structural Materials for your project.

# WELDING INSPECTION REPORT

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**Inspected By:** Dawson,Paul Quality Assurance Inspector **Reviewed By:** Carreon, Albert QA Reviewer